Religion as Biological Destiny

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by Brant Wenegrat, D.C. Heath, 1990
(not for quotation, consists of notes taken from book without complete references)

Vocatus Atque Non Vocatus Deus Aderit

"Summoned or not, the god will be there."
Spoken by the Delphic Oracle to the Lacedaemonians
Carved by Carl Gustave Jung above the door of his house

Wenegrat's book owes much to Jung's psychoanalytic theories, especially the idea of an inherited collective unconscious. Sociobiology is not always oriented to psychoanalysis. Wenegrat's sociobiological model of religion attempts to synthesize psychoanalysis and evolutionary explanation, building a case for religion as a genetically encoded aspect of human nature that is an extension of human dependency needs.

1. Introduction

Religious beliefs play pervasive roles in social adaptation. Therefore, they should be explainable in evolutionary terms. Human behavior adheres to certain innately probable strategies, called response rules. In the case of religion they are social response rules. Adherence to social response rules is made more likely by a species' genes. Religious beliefs reflect cognitive preferences that are part of these strategies, hence they reflect ancient selective pressures that have shaped the human intellect.

Religion will be defined here as any and all beliefs in imaginary beings with supernatural powers, regardless of their cosmic, metaphysical, or ethical content. Supernatural powers are defined as the ability to accomplish seemingly impossible feats without means visible or apparent to humans. What is the function of such beliefs? Why are supernatural powers attributed to imaginary beings? In order to fulfill their social and psychological functions, these beings must be able to act through incomprehensible means.

This analysis will not consider quasi-religious beliefs such as socialism, psychoanalysis, and fascism, even though adherents to these beliefs form insulated organizations, inspirational literature, and rituals. Other aspects of religion that will not be considered are personal immortality, awareness of death, submission to higher powers, perceptions of the Holy, feelings of absolute dependence, conservation of values, the wish for fellowship, justification in nature, the search for first principles, or the desire for moral perfection, even though all of these have been important in the study of religion. They will receive little attention in this analysis.

Certain religious traditions such as Buddhism seem to disregard supernatural beings. Certain legends ascribe quasi-physical origins of supernatural or religious beings. Magic deals with supernatural powers, though possessed or guided by humans. And there are allegorical figures who are imaginary, but are consciously treated as symbols. Sometimes the distinction between allegorical symbolism and real belief is blurred. Once such figures seemed real, and even then they served allegorical functions. All of these will be secondary matters in this analysis. Primary significance will be given to sincere beliefs in imaginary beings with supernatural powers.

2. A Sociobiologic Model

Innate Probability

Wenegrat (1984) states that social life is guided by various strategies, some are *innately probable*. Strategies are response rules concerning specific social and environmental exigencies. Innately probably strategies are those made likely by a species' genes, and are recognizable because they are *universal* to the species, and because they can be shown to affect the reproductive success of individuals positively, and hence are adaptive, in the evolutionary sense.

Inclusive fitness is the number of copies of an individual's genes, in both direct descendants and co-descendants, that is lost or gained in the next generation as a result of adherence to the genetically induced strategy. Positive fitness means more copies. Hence, positive fitness is adaptive. Negative means fewer copies. Hence negative fitness is maladaptive.

For example, generalized, reciprocal altruism may help an individual survive over the long haul. Individuals who are not generally altruistic may find themselves denied crucial assistance by others at some time in the future, because others know that such individuals will not reciprocate.

Human affiliative behavior is known to depend on genetically determined, mental mechanisms. From birth, human infants attend to social stimuli (Spitz, 1965). Young babies produce and interpret others' gestures without having to learn them. The syntactical structure of language may be biologically encoded.

Social bonds created in the first days of life are succeeded by progressively wider and more differentiated social commitments that depend on biological factors such as sexual attraction, affective responses to children, and a capacity for emotional experiences.

For example, altruism requires facial recognition, which occurs in brain sites different from the sites of general pattern recognition. Generous feelings motivate altruistic acts, and angry feelings are evoked when others are seen as selfish.

Certain psychotic disorders show clearly how generous and aggressive motives depend on brain function. For example, Mania is an inherited, familial condition. Manics are markedly overgenerous, and also quick to believe others have failed them, causing them to become excessively angry. Also, victims of temporal lobe epilepsy sometimes display both exaggerated warmth and excessive anger.

Altruism is more probable in a species that foresees the long-term consequences of their behavior toward others. Foresight necessitates remembering how others have behaved. Genetic structure produces perceptual mechanisms, memory capacities,

somatic motives, cognitive and affective functions, and communicative and motor subroutines.

High-level strategies subsume important behaviors that take up much of an individual organisms' time and energy, accounting for common preoccupations and common affective responses. They also determine how people use religion. Intellectual processes that promote adherence to highly advantageous strategies produce religious beliefs as incidental effects. Whatever disadvantages that religious behavior causes are outweighed by its advantages.

There are five social strategies that roughly correspond to various human potentials. They are:

1. to be a parent, or
2. a helpless child
3. to be a sexual being
4. to be a member of a group, and
5. to be a potential saint or narcissist

Infant-Caretaker — *Proximity Maintenance*

Bowlby described complementary infant and adult behavior patterns that tend to maintain proximity between infants and their specific adult caretakers (1969, 73, 80). Proximity maintenance is realized through diverse behaviors. Its adaptive function lies in the provision of aid, triggered by signs of infant distress, such as crying. Proximity maintenance behaviors are found in all human societies. They are robust, i.e., can survive many impediments.

They are also found among non-human primates, and were probably fixed in the genes before the divergence of the hominid line. Proximity to children must be maintained in order for adults to respond to children's needs. Also, children must signal their needs. Failure on either part places the life of the child at risk. Hence, these are important adaptive behaviors.

Over time, proximity maintenance behavior occurs less often, and fewer events will trigger it. Once an individual is mature, only severe traumas produce this response. However, some children never outgrow it, and some parents never learn to let go.

Sexual strategies

The sexual strategies of human males and females are very different, resulting mainly from differences in the minimum *parental investment of time and energy* and the different strategic qualities of the two sexes' sexual behavior. In mammals, sexual strategies of males and females are markedly different. For males, sexual strategies revolve around maximizing sexual intercourse. For females, sexual strategies revolve not only around sexual intercourse, but also around pregnancy and lactation.

Therefore, males can have far more offspring than females. Male reproductive success is limited only by access to sexual intercourse with females. Males compete with each other for access to a limited number of females. Maximizing the success of one male involves depriving others. Because males compete for sexual intercourse, females easily bare their maximum number of offspring, but they also must give to each offspring the best chance to live.

This is accomplished by selective mating with competitive males who win in the struggle between males. Winning the struggle increase the chances of a male's reproductive success. Females also tend to mate with males who are beneficial to the survival of their offspring through male territorial behavior, through male defensive behavior directed toward protecting females and offspring, and toward providing resource assistance to females and offspring. These strategies are found widely among non-human primates, and in all human societies where females need assistance to successfully raise their offspring.

In order to give assistance to their females and offspring, males compete for resources that are useful to them. Sexual privileges with the most fecund females are among the prerogatives of successful men. Generally, men compete with each other according to social rules, but competition can also take violent forms. Men court women more than women court men. While they are courting, they try to show that they have more than a sexual interest in the female. Men who lack affection tend to be unreliable fathers. Women prefer successful men who are also willing to bond to the women and their children.

In combination, the male and female sexual strategies are complementary and evolutionarily stable. Failure on the part of either sex to engage in these strategies reduces the production and survival of offspring. Men and women are genetically predisposed to adhere to these strategies, primarily as expressions of sexual differences in sexual arousal levels and aggressive tendencies. In sex and aggression, males exhibit genetically determined higher levels than females.

Sexual strategies affect the level of within-species violence. An important implication of sexual strategies is that individual males must be able to compare their powers with other males in order to assess their resource earning and holding power. Among humans, resource earning and holding power is wrapped up in the kinship system, and in social and political connections, depending more on intelligence than physical power. Assessments of resource earning and holding powers directly determines the tactics used by males in sexual competition.

The Freudian Oedipal complex can be explained by evolutionary selection as an expression of male preoccupation with sexual competition, where the father is both a competitor and a role model for the sons to identify with.

Mutualism

Certain projects require cooperation to complete. Even lower animals carry out such projects, suggesting that cooperative behaviors evolved very early in evolutionary history. Certain spiders, for example, choreograph their spinning so as to build common web supports. This is not flexible behavior, though. It is tightly determined by genetic codes.

More flexible patterns of cooperation exist among phylogenetically higher species. For example, many predatory species, including lions and baboons, cooperate in defensive, foraging, and predatory expeditions. Every expedition is to some extent unique, requiring flexible coordination of behavior between individuals. The readiness to engage in flexible cooperation reaches its peak in human beings. Interactive strategies are generically referred to as *Mutualism*.

Mutualism requires two separate behavioral components:

1. identification of the cooperating group, and
2. acceptance of common goals and common world-views among group members.

Both of these are related to the tendency of humans to form tightly knit groups of individuals who are highly conscious of group membership, and suspicious and rejecting of outsiders.

In-group vs. out-group social psychological characteristics such as prejudice and hostility towards outsiders, and attenuation of hostility and violence toward insiders, are related to the evolution of cooperative strategies. Both of these aspects of Mutualism are universally evident. Humans everywhere consider themselves members of one or another in-group, in which trust and cooperation are at least the ideal, if not in fact always realized. An invidious distinction is always drawn between in-group members and other persons.

Although the negative attitudes toward outsiders varies considerably, from disinterest to dehumanization and hatred, the gradient of hostility is always steeper in the direction of outsiders. Avoidance of outsiders is highly correlated with positive feelings toward in-group members.

Evidence from modern hunter-gatherer tribes and from non-human primates indicates that cooperating in-groups that are more or less hostile to outsiders are not the result of more advanced civilization. They even antedate hominid evolution entirely. Moreover, every human group has its consensual world view, acceptance of which is required for active membership in the group. The consensual world view includes environmental maps, theories of specific events, moral and social values, and cosmological theories that place group life in a universal perspective.

Other species share consensual world-views, but to a limited extent because of the lack of language. Bees, for example, share maps of their local topography, but lack the means to formulate or communicate theories on the formation of nectar. In human groups, by contrast, the subject matter and detail of consensual ideas are more or less unlimited.

Flexible Mutualism has many adaptive advantages, including common defense against predators. Among hominids, cooperative hunting allowed early hominids to hunt larger game. Increased hunting productivity more than compensated individuals for the need to share among the group members. Enduring groups can also improve their technology, and pass this knowledge on to future generations. Therefore, each individual in a group benefits from the thinking of previous generations, not just from the immediate examples of parents' behavior.

Once established in a population, tendencies to form enduring mutualistic groups are evolutionarily stable. An individual that fails to participate in such groups forfeits the benefits of common endeavors. Insofar as mutualistic groups interfere with the survival and reproduction of nonparticipants, an isolated individual would be doubly penalized for nonparticipation. Hostility to outsiders would make such individuals suffer even further, reproductively speaking.

To participate, the individual must desire cooperation, see himself as a working part of the group, share the consensual viewpoint on which group endeavors are founded, or, in other words, accept socialization.

In human groups, consensual world views are maintained by designated authority figures who edify and correct other members. Authority figures are individuals whose thoughts and attitudes about particular concerns are deemed valid in a group. When such individuals speak, their statements bear the mantle of social validity. With that mantle, acceptance of their statements is more or less guaranteed.

An individual who refuses to accept the views of authority figures refuses, in effect, to accept the world-view of the group, choosing therefore to be an outsider, culturally speaking. Such individuals are deviant, potentially threatening to the solidarity of the group, and are typically mistreated by other members of the group as part of the group's means of maintaining its culture and identity.

Altruism

Early efforts to explain the evolution traits, including altruism, were based on the advantages of a trait to a species. However, natural selection does not operate on species, only on individuals. It operates on species through individuals. Therefore, altruism must be beneficial to individuals in order to be beneficial to a species.

[Natural selection affects various traits as they operate simultaneously, in interaction with each other. Various traits exist in balance with each other, with the net advantages of their combined effects determining their separate strengths. For example, strength and aggressive tendencies are one advantage to reproductive success, and interdependence between individuals confers advantages, too. Therefore, aggressive tendencies have only limited selective advantage to individuals in a social species, insofar as those tendencies if maximized would interfere with the cooperative strategies an individual engages in. Aggressive tendencies are therefore optimized by natural selection instead of maximized.]

There are two situations in which altruistic behaviors result in greater, positive inclusive fitness (i.e., genes that predispose individuals toward altruistic acts in these two situations will out-reproduce other genes). The first concerns *kin selection.* When the potential beneficiaries of altruistic acts are closely related to an individual, both the beneficiary and the altruistic individual are likely to share the altruistic genes because of their common descent. In such situations, altruism results in the greater likelihood that the altruistic gene will survive, since the benefits of altruism contribute to the reproduction of the altruistic gene, regardless of which individual acts altruistically at his or her own reproductive expense.

The second situation in which reproductively costly altruistic behaviors will be selected is when individuals live in social groups that are conducive to reciprocal altruism. Reciprocal altruism means that one individual helps another, resulting in claims on that other person's assistance at some later date. The reproductive costs of helping another are frequently much less than the reproductive advantages of receiving assistance. Reciprocal altruists protect themselves from exploitation by refusing favors to those who have not been generous, and, perhaps, by punishing exploiters in order to discourage cheating.

Group reciprocal altruism is like group Mutualism, but the costs and payoffs are separated in time. Thus some pay early,

and gain something later, whereas others gain early, and pay later.

Both kin-directed and reciprocal altruism are found in all human societies. They also are found among nonhuman primates. Kin-directed altruism is reproductively advantageous, regardless of the frequency of the genes in the population at-large. Reciprocal altruism is evolutionarily stable only when it is present in most of a population. Reciprocal altruism is a spin-off of kin-directed altruism.

In order for kin-directed altruism to exist, individuals must be able to identify their kin. Hunter-gatherer societies, which resemble prehistoric societies in which most of human behavioral evolution occurred, inbreed sufficiently that all local tribe members are close genetic kin (Chagnon, 1979). Similar findings characterize nonhuman primate groups (Chepko-Sade, 1979).

Reciprocal altruists must remember the past behavior of potential beneficiaries, and they must be able to distinguish between real and apparent aid, and to assess the sincerity of those who claim to have changed their ways to more altruistic patterns. Such behaviors depend on communicative and social skills, which require certain cerebral structures. Some scholars have argued that the spread of reciprocal altruism led to the growth of the human cortex during the Pleistocene epoch (Trivers, 1971).

Selective Retention

Certain aspects of human behavior are universal, but not stereotypical. The specific behaviors associated with general tendencies vary greatly from one locale to another. Different dietary needs are satisfied by different foods. In one society men fight for resources with clubs and poison darts. In another society, men fight with attorneys. In societies that use clubs and darts, hiring attorneys would be ineffectual. In societies that hire attorneys, clubs and darts are usually not permitted.

How do people change their manner of fulfilling innate strategies? Beginning with William James, evolutionary theorists have invoked various forms of selective retention theories which suggest that new cultural patterns, including ideas, ideologies, and social and technological innovations, are discarded or retained by individuals whose choices are influenced to a significant degree by certain innate dispositions.

If innate biases make a particular artifact even slightly more pleasing or easier to use in a given environment, or if they make its promised effects even slightly more appealing, then the artifact in question is much more likely to be retained through repetitive and aggregate choices. This gives rise to cultural drift, as humans discover alternative methods of fulfilling innately probably strategies. However, random fluctuations in culture, as well as unforeseen disruptive effects of cultural change, tend to be self-limiting. They mobilize restitutive forces which are often religious in nature (see discussion of cults, later).

Selective retention theories have especially interesting implications for ethical ideologies. Ethical ideologies are presumably retained or discarded like all other cultural products. However, since the adoption of ethical mores also implies their enforcement, those with the greatest power in any given society have a disproportionate influence on ethical rules. They are more able to discard traditional mores without fear of punishment. Therefore, the choice of whether to selectively retain or discard ethical mores will be primarily for the powerful to make, and will reflect their preferences concerning others' behavior.

Insofar as these preferences are consistent with their innately probably strategies, ethical mores will promote the strategic interests of those with power. The weak, by contrast, usually can neither impose ethics on the powerful nor disregard the strategic interests of the powerful. They can neither impose ethics on the powerful nor disregard the ethics imposed on them. It is consequently less likely that the ethical mores will faithfully promote their socially strategic interests.

The sociobiologic model presupposes that religious beliefs are factually erroneous, i.e., cultural inventions. Insofar as this is correct, selective retention theories require that these beliefs serve, or appear to serve the innately probable strategies of either the faithful or their masters. Otherwise, they would more or less be quickly changed or discarded. If the bewildering variety of religious beliefs actually serve or appear to serve just a few social strategies, then these strategies can be used to categorize the otherwise seemingly infinite psychological functions of religious beliefs. It is to this categorization that the discussion now turns.

3. The Strategic Functions of Religious Beliefs

The sociobiologic model predicts that genetic activity will produce perceptual, cognitive, affective, and motoric dispositions that, in combination, promote adherence to *innately probable strategies*. Cultural innovations, including religious beliefs, are likely to be retained only insofar as they are useful, or promise to be useful to individuals pursuing these strategies. Religious beliefs promote or promise previously described social strategies. These strategies will now be discussed in relation to religious beliefs.

Proximity Maintenance and Religious Beliefs

Attachment to God

Infants maintain proximity to caretakers, and adults are easily provoked into proximity-maintaining behaviors that are echoes from their past infancy and childhood [what psychoanalysis calls regression]. Numerous studies show a relationship between religious belief and dependent personality traits (Rokeach, 1960). Dependent persons adopt religious beliefs as a means of coping with loss (Ostow, 1980). Sects and cults, in particular, attract dependent persons who are unable to cope with their lives (Halperin, 1983; Simmonds, 1977). The highest frequency of depression, suicidal ideation, and drug use are among dependent personalities.

Like dependent persons, religious persons tend to be obedient, conforming, and anxious to obtain approval. Religious beliefs promise to serve attachment needs, whenever these needs are salient in adult life.

How is this promise made? Some rituals and prayers depict God as an attachment figure, as a caretaking, watchful, protective, nurturing parent. Believers most attracted to prayers like the 23d Psalm (the lord is my shepherd) are those with the greatest dependency needs, in whose lives proximity-maintaining strategies play the most salient role.

Projection of caretaking qualities on a deity is an ancient and universal phenomenon. There have been ancient Earth-Mother-

Nature religions. Catholics direct their attachment wishes to the Virgin Mary, a semidivine, desexualized maternal figure.

Freud wrote about the *regression* to infantile dependency that characterizes religious persons. He considered the child-like wish for nurturance and protection to be at the very core of religious beliefs. In life, these functions are initially provided by the mother, who is gradually replaced by the father, with whom the male child has an ambivalent relationship. By inventing God, and by relating to Him in the same ambivalent way as they relate to human fathers, adult males deny their helplessness.

Jung wrote that *the faithful try to remain children*. In his account of *healthy-minded* believers, William James wrote that optimistic believers think of God as a loving parent, the personification of kindness.

Sprio and D'Andrade (1958) used ethnographic data from 11 societies to study the relations between child-rearing methods and forms of religious belief. They found strong relations between them. For example, societies that satisfy early childhood dependency and oral needs believe in supernatural beings who can be compelled, through ritual, to lend their aid whenever it is required. Societies in which children must solicit assistance from their parents believe in supernatural beings whose aid must be solicited. In general, parallels exist between parental responses to children's needs and how adults expect to be treated by supernatural beings.

Attachment to Religious Leaders

Religious leaders can be attachment figures, especially if a belief system promotes them in this role. Charismatic leaders of cults undoubtedly serve this function for their followers. Smaller sects, in particular, promote the formation of fantasized, infant-like attachments among followers. The fact that many cult leaders are psychotic in no way prevents this. Rather, certain psychoses in leaders and followers tend to promote cult-like patterns of dependency.

[Note that other institutions, such as marriage, education, politics, and organizational aspects of businesses show similar patterns of meaning and function. Religion is not the only institution to reflect dependency patterns.]

Breaking Attachments

Religious beliefs are frequently involved when attachment bonds must be broken, such as when dependent persons must separate themselves from parents. In most societies, adult status requires at least a semblance of independence from parents. This may pose a problem for dependent adolescents who become anxious if their ties to parents are weakened. Dependent persons also form ambivalent relationships with their parents, or other caretakers. The dependent adolescent is frequently angry toward the very persons from whom separation seems so threatening.

Religious beliefs, by providing real or imaginary substitute attachment figures, helps dependent people break ties with their parents. Moreover, religious beliefs are more socially acceptable than continued dependence on parents. Ostow (1980) described an outcome of this as follows: The hostility that dependent believers express toward their parents is reflected in adolescents becoming more orthodox and pious than their parents, thus honoring their parents' religion, but in a fashion that emphasizes their parents' shortcomings.

In cases of rejection of religion, poor parental relations are more directly expressed. Ostow (1980) described a 20 year old woman raised in a New York Jewish family. Her relations with her parents were ridden with conflict and dissatisfaction. In high school she was promiscuous. After being thrown out of school for drug trafficking, she left home to work as a nude model. While traveling in Mexico, she met a young, male peasant who took her to live with his family. She felt like a family member. She took hallucinogenic mushrooms and saw Jesus. He seemed loving and kind, and he urged her to convert to Catholicism. The local priest considered her motives abnormal, but she nonetheless managed to be baptized into the church. She then returned to New York to visit her parents. By flaunting her apostasy and conversion, she upset her parents even more effectively than she had with her previous promiscuity and drug use. She went back to Mexico to live with her newfound family.

Spero (1982) described some cases illustrating the link between piety and defiance. Isaac was the 22 year-old son of alcoholic parents. The father was feeble-minded and had never managed to support the family. The mother was violent. She had frequently been hospitalized following fights with her husband or fights at local bars. The only reliable people in Isaac's early life were his maternal aunt and her husband, who were both religious Jews. At the age of 18, Isaac began to adopt their faith. His parents objected violently. Isaac defied them by joining a Hasidic youth hostel and becoming more orthodox. He criticized his parents for being poor Jews. Isaac's increasing religious fervor alarmed even his religious friends. Soon, he became so orthodox that he criticized them as well. They persuaded him to have psychological treatment. In therapy, Isaac proved to be obsessed with various Jewish heroes. He saw them as highly idealized figures, an attitude that expressed his dependency needs. He believed literally in their superhuman powers. He eventually realized that he was angry at his parents for failing him.

Levin and Zegans (1974) described a similar patient, Phil, whose parents were nonreligious Jews. Phil's mother was critical and over-protective. When Phil was young, she frequently lost her temper with him. His father was quiet and introspective. He followed his wife's lead in all matters related to their children. He favored Phil's younger brother. Phil had an intensely religious uncle [maternal uncle] whom his mother despised for his religiously conservative views. As a young child, Phil had been angry and finicky. He fought with his brother and with other children. He had been a loner in elementary school. Later, he was sent to boarding school where he developed food fetishes and a preoccupation with weight-loss.

Concerns like these are common among adolescents, and are frequently associated with problems in separating from over-controlling parents. Phil developed grandiose delusions, but his mother signed him out of a hospital against medical advice. At home again, his delusions went away. He was able to finish high school and entered an Ivy League college. In college, he became an Orthodox Jew. He believed that he might fall ill for failing in any religious observance. By the time he returned home for his first summer vacation, his behavior had become bizarre and ritualistic. He spent hours cleaning his

food, which had to be both organic and kosher. When his father insisted that he stop, Phil became mute. He was taken to a hospital, where he was diagnosed as schizophrenic.

By adopting his uncle's faith, Phil defied his powerful mother. Phil's mother didn't control Phil's uncle as she controlled Phil's father, and Phil knew that his mother despised his uncle's religion. By identifying with his uncle, Phil was behaving like a man who wasn't controlled by women. Also, Orthodox Judaism is patriarchal, and male-oriented. It devalues women, who are not even counted as full members of the congregation. men like Phil, who have grown up dominated by a powerful female attachment figure, might feel bolstered by its patriarchal orientation in pursuing their own separation from their mothers.

Religious conversion can have the opposite meaning, too, i.e., a way of maintaining relations with parents from whom the young adult is unable to separate. Roberts (1965) studied 43 students from a conservative evangelical college. They were all in their 20s, and all but one was male. He found that the 10 students who had experienced a sudden conversion to the faith of their parents were significantly more neurotic in their answers to the MMPI test. On the basis of test scores and interview data, Roberts concluded that sudden conversions of this kind signify capitulation to the parents. Such conversions are regressive solutions to adolescent emancipation problems. The sudden convert, in effect, gives up and returns to the parental fold. By contrast, those who had gradually adopted their parents' faith seemed to have had fewer problems with emancipation.

Attachment bonds also need to be loosened following the death of a loved one. Religion helps during grief and bereavement. In general, dependent persons often adopt religious attachment figures following loss. People everywhere seem to believe that they can still relate to kin who have died.

Yap (1960) studied 66 Hong Kong mental patients who complained of possession. The souls of dead relatives play an important role in Chinese folk beliefs, so it is not surprising that 39 of these patients believed themselves possessed by deceased family members. One patient, by way of illustration, believed herself possessed by the spirits of her dead husband and her mother. As a child, she had been given to her eldest uncle, because he had no children of his own. It was considered important for the eldest son in the family to have children who could carry on the rites of ancestor worship. Later, she was given away to her future husband's family and raised with him until their marriage.

The traditional practice of rearing together children who would one day marry has been shown to promote marital problems and sexual dissatisfaction. [It is not unlike brother-sister relationship, with its rivalries and incest-taboo. In general, people show little sexual interest in the people they grow up with.]

Her husband had died of typhoid fever two years before the onset of her spirit-possession, leaving her with 3 children, one of whom she could not feed, and had been forced to give away. She worked as a coolie and a vegetable hawker. Because she received aid from a Catholic welfare agency, she had recently converted to Catholicism. She was not entirely happy with the change in religion. Her neighbors had criticized her for it, and she felt guilty for neglecting her husband's grave. She had received a marriage proposal but had refused it because she thought it was improper for a widow to remarry. Six days before her hospital admission, her employer had cheated her out of her salary. In the hospital, she was agitated and tearful, expressing fears that she would lose her remaining children. She had nightmares in which her dead relatives criticized her for becoming Catholic and neglecting their graves. She believed that she was having intercourse with her husband's ghost, who told her that he did not want her to remarry. Her mother possessed her and complained about her change of religion. She feared that abandoning her new religion would offend the Virgin Mary, and so she attempted suicide. She never fully recovered from these internal conflicts between starting a new life, with a new religion, and remaining loyal to her lost relations.

Fear of Death

Believers frequently believe in survival after death, and that the after-life will be good. Dixon and Kinlaw (1982) found that among 534 normal subjects, 439 (82%) believed in an afterlife, and only one of those 439 expected her situation after death to be unfavorable. Everyone else expected to go to some form of heaven. Spilka, *et al.* (1985) reviewed 36 studies, finding that belief in an afterlife reduces anxiety over death. Some scholars, such as Malinowski (*cf.*, 1974), are convinced that fear of death is the primary cause of religious belief.

Children's idea of death is equated with vanishing, becoming lost, or being trapped or kidnapped, reflecting fears of loss of attachments. Children learn of death while they are pursuing proximity maintenance strategies, hence death is seen as a form of "going away" from caretakers.

Spinetta, *et al.* (1974) studied leukemic children, finding that they feel separated from parents and caretakers. Bereaved children who have lost their parents don't understand death in its abstract meaning. What they feel is that their parents have abandoned them (Raphael, 1983).

The fear of death is an expression of separation anxiety. If it retains this meaning in adult life, then the psychological defenses against it should betray that meaning. Yalom (1980) cited two patterns of adult defenses against death anxiety: The first is an involvement with an *ultimate rescuer*, a caretaker whose powers seem capable of protecting against all harm. For the believer, religion provides such an imaginary rescuer. Nonbelievers must find real persons with whom they can form dependent relationships. The second pattern is a near-delusional belief in one's own special nature, closely resembling pseudo-self-sufficiency, causing one to be intolerant of even minor degrees of dependency.

Parental Investment Strategies

Reynolds and Tanner (1983) argue that parents maximize their reproductive success by having many children, and giving them minimal care, or by having few children, and caring for them intensively — two alternative strategies. Ecological factors that produce stable material supplies trigger the strategy of having an intense investment in fewer children. Ecological factors that lead to material supply instability trigger the strategy of having many children, with less parental investment in each child. They further argue that religious beliefs and rules reflect these choices by promoting the strategy that is most effective within an ecological region.

Regions low in material stability, are in fact, associated with religious beliefs that promote larger families, discouraging intense investment in caring for individuals. They are pronatal, and anti-care. Regions high in material stability, are in fact, associated with religious beliefs that promote smaller families, encouraging intense investment in caring for individuals. They are antinatal and procare. However, it must be noted that causation can work both ways. Encouraging a high birth-rate in a materially stable ecological area can impoverish a region, making it materially instable. And by stabilizing population and emphasizing individual health, a society may produce greater material wealth.

Another criticism of this theory is that religious rules may not be chosen by parents at all. Instead, they may be chosen by more powerful persons who are able to impose their preferred strategies on parents. For example, in the 4th century BC, Carthaginian priests required aristocrats to sacrifice their first-born children. At least some Carthaginian nobles purchased lower-class children to sacrifice in place of their own. The priests subsequently levied a "fine" of 500 additional aristocratic children to be given to the Carthaginian god Bal Hammon. This is clearly a case in which parental investment decisions that parents evaded were enforced by a more powerful group to serve its own political needs for demonstrating their power.

4. Sexual Competition

Chastity, Permissiveness, and Disavowal

Males compete with each other for a maximal sexual access to females. Females seek males who are superior, and who are able and willing to help raise their children. Both strategies entail anxiety-provoking conflicts with other persons. These conflicts occur not only between competitors of the same sex, but also with objects of sexual interest, and with parents and authority figures who have a stake in the reproductive arrangements of individuals.

Religious beliefs decrease anxiety related to attachments, and to sexual strategies also. They ease sexual fears by providing divine guides to sexual decision-making. Religion may also be used to flee from conflict-ridden sexual feelings, or may provide a guide to sexual activity for which one cannot be blamed. By prescribing the nature and circumstances of acceptable sexual activity, religious rules can relieve the sexually fearful person of the need to make anxiety-provoking social decisions.

However, insofar as people perceive a choice regarding sexual matters, religious beliefs may magnify anxiety due to fear of divine retribution and guilt being added to the inherent anxieties of sexual strategies. Fears related to religiously anchored sexual taboos have been obvious to psychologists ever since Freud called attention to them. But other sources of anxiety in sex have been largely ignored, as if sexual activity could be free of anxiety if religious taboos were dropped. Freud knew this wasn't so. He understood that biology rendered sexual choices inherently conflict-ridden, but his thoughts on sexual taboos attracted more attention. In fact, Freud saw taboos and inherent conflicts as closely interwoven.

Sociobiology takes the same position in portraying ideology as a tool of social control shaped by the powers-that-be to serve their own interests, including, presumably, their inclusive fitness interests. Ideological conflicts are therefore, ultimately, reflections of interpersonal conflicts.

The post-Freudian emphasis on the cultural-religious source of sexual anxiety has ignored how sexual mores can also alleviate anxiety in conducting sexual strategies (Vergote, 1988). For example, numerous studies have shown decreased rates of premarital intercourse and premarital conceptions among religious subjects.

Many cult-like groups have extremely anti-sexual norms which help recruit sexually anxious converts. Studies of converts to these cults sometimes mention that sexual fears contributed to their conversion. The Unification Church is one example of this phenomenon. Lofland and Stark (1965) studied an anti-sexual cult. To avoid sexual intercourse, one convert had locked herself in the bathroom on her wedding night. The continued to abhor intercourse through nearly ten years of married life. A homosexual encounter with a neighbor woman upset her so much that she made her family move. Shortly thereafter, she converted to the cult studied by Lofland and Stark.

Psychological case histories sometimes show religion in the service of sexual phobias. For example Ostow (1980) described a young man who was made extremely anxious by non-genital intimacies with his fiancée. He thought his anxiety resulted from guilt. However, when his pastor reassured him that such intimacies were proper for an engaged couple, he questioned the pastor's authority. He wanted religion to keep him from the sexual acts he feared.

Kutty *et al.* (1979) described a 15 year old male member of the Hare Krishna movement who, after unsuccessful efforts to have a heterosexual relationship, lost all confidence in his abilities with the opposite sex. He found sexual abstinence, as promoted by the Hare Krishna movement, more and more appealing, because it allowed him to rationalize his sexual phobia, to avoid blows to his self-esteem.

Mahatma Gandhi was married when he was 13 years old. When he was 16, he fell ill. His relationship with his father was highly ambivalent. One night, Gandhi quit nursing his ailing father and went to his own room. There, he woke up his pregnant wife for the purpose of sexual intercourse. While he was gone, his father died. Although her pregnancy was very advanced, his wife miscarried several weeks later.

Gandhi blamed himself for these tragedies, feeling deeply ashamed. Four decades later, he wrote in his autobiography that he still felt shame for his *animal passion* on the night of his father's death. When he was 31, he resolved, with his wife's consent, to abstain from sexual acts and from male aggression. His resolution to his guilt problem extended to the entire realm of masculine sexual-competitive actions. He struggled for 5 years to suppress his sexual urges, finally taking a religious vow and giving sex up for good.

His ambivalent relationship with his father and his emotional response to his father's death suggest that his sexual shame was derived from filial conflict. Yet, he chose to explain his celibacy in traditional Hindu terms. According to Hindu scriptures, conservation of semen increases spiritual strength and brings one closer to God. Although he took a religious vow, he disregarded Hindu scriptural injunctions to reduce his sexual drive through avoiding contact with women. He apparently had to show he had risen above temptation. Women bathed

and massaged him, and eventually slept with him naked. Orthodox Hindus were outraged by Gandhi's apparent hypocrisy. Sleeping with naked women in order to test one's restraint was advocated by Christians, too, in the early years of the Church.

A nocturnal emission in his 67th year horrified Gandhi. He wrote about the experience, saying:

> *My darkest hour was when I was in Bombay a few months ago. It was the hour of my temptation. Whilst I was asleep, I suddenly felt as though I wanted to see a woman. Well, a man who had tried to rise superior to the instinct for nearly forty years was bound to be intensely pained when he had this frightful experience. I ultimately conquered the feeling, but I was face to face with the blackest moment of my life and if I had succumbed to it, it would have been my absolute undoing.*
>
> (Shirer, 1979, p. 238)

Religions do more than forbid sex. They also permit certain sexual acts. In this way, religions provide a guide to conflict-free sexuality (Vergote, 1988). Jewish tradition, for example, sanctions lawful intercourse between man and wife. The frequency of intercourse is specified in the traditional marriage contract. In marriage, the couple may have sexual relations free from disapproval.

Religions sometimes promote sex outside monogamous marriage. For example, certain Semitic and Greco-Roman shrines offered male worshippers access to sacred prostitutes. Priestesses, in some cults, were highly valued courtesans. On special festival days, rules of sexual conduct are partially suspended in many societies.

Although Christianity on the whole has been anti-sexual, splinter groups have permitted sexual activity forbidden by mainstream churches. For example, as early as the 3d century, a Persian dualist named Manes, for which the Manichean cults are named, established a sexually promiscuous community on the shores of the Jordan river. The Manichean heresy was important in early Church history. St. Augustan turned to this doctrine to ease his sense of sexual guilt (Bokenkotter, 1979). As late as the 19th century, some Christian sects in the U.S. practiced communal marriage, and communal marriage is still practiced by some present-day cults.

Finally, some religious beliefs help the faithful disavow their sexual aims. Once disavowed, sexual wishes may be expressed without risk of divine or psychological retribution. For example, Galvin and Ludwig (1961) described a 17 year old Mexican-American girl who claimed to be bewitched. Her history illustrates how disavowed impulses that are consistent with existing social arrangements can achieve partial fulfillment. Their disavowal was effective because of traditional beliefs in witchcraft. During trances, the girl acted out various sexual themes. On one occasion, for example, she seemed to be in labor. She moaned and writhed, claiming to have contractions. She said a witch had put something in her vagina in order to discredit her. On other occasions, she hit and scratched her parents, or called them abusive names.

Her stepfather could end her trances by stretching out on top of her as she lay on her back. However, the mother grew jealous of this activity. She thought she saw a *man in black*. This man told her that her daughter and husband were making love in secret. Not to be outdone by her daughter, she, too, fell under a spell and tried to attack her husband. Fortunately, he was able to douse her with salt, which brought her to her senses.

The witchery touched him, too. One night he awoke for no apparent reason. His wife was sleeping next to him. He reached over and touched her breast, but it felt to him like his stepdaughter's breast. He concluded this was due to witchcraft. Clearly, the members of this family were expressing their sexual preoccupations under the guise of witchcraft and spirit possession. In this manner, they were relieved of any blame and guilt that would otherwise have caused them anxiety and brought out their conflicts into the open.

Oedipal Themes in Male Religious Belief

Psychoanalysts believe that early experiences with parents and siblings underlies adult sexual competition. The sociobiologic model suggests that early experiences with parents only prefigure adult attitudes. Precocious experiences with intrafamilial sexual competition may color later expectations, and in this way determine adult competitive styles, but they do not truly motivate competition.

The sociobiologic model also implies that early competitive experiences will be less important for females, except under special circumstances. This is because inclusive fitness considerations dictate that sexual competition should be less fierce among females than among males, and should therefore be accorded less time and energy in adult strategies.

Psychoanalysts have found that Oedipal concepts have less bearing on female patients, but this clinical observation has failed to have much effect on psychoanalytic theory. It continues to be male-oriented. Regardless of their differences, psychoanalytic theory and sociobiological theory both portray the adult male as preoccupied with sexually competitive concerns. Insofar as religious beliefs address these concerns, they should express and reconcile males to their ambivalent filial attitudes, pushing males toward both submission and defiance of the father.

According to Freud, God is modeled on the child-like notion of an all-powerful father. Religious rituals appease this heavenly father figure, while religious customs define the safe circumstances for instinctual gratification. Freud's formulation turns out to be overly simplified. There are persons, including some men, for whom God is a predominantly maternal figure, or for whom God has characteristics borrowed from both parents.

Perhaps the most influential man to see his father in God in more recent times, and to work out filial conflicts in relation to a divine father figure, was Martin Luther. Luther's father Hans — in whose image the Christian God was to be remade — was the oldest son in a 15th century Thuringian peasant family. Thuringia is a forested region of central, East Germany. In accordance with local customs, the family farm was inherited by Hans' younger brother. Hans moved to Mansfeld, a copper and silver center, to work in the copper mines. Ambitious, hard-working, and thrifty, he eventually became a small-scale capitalist, holding shares in the mines and foundries.

Hans was known for his bad temper. He may even have killed another man in a fit of violent rage. he beat his children for minor offenses, but was seldom satisfied by their efforts to please him. Luther's mother, Margareta, a downtrodden and superstitious woman, seemed to have been completely overshadowed by Hans' stronger personality. Hans expected his son, Luther, to become precociously independent from his mother. Hans repeatedly drove a wedge between mother and son. Young Martin was said to have been a sad, anxious, and thoroughly browbeaten child.

Hans wanted Martin to study law. At the age of 17, Martin enrolled in the university at Erfurt. On a visit home in 1505, he found out that his father had arranged a lucrative marriage for him. Apparently, Martin was troubled by these plans, but afraid to confront his father. On his way back to school, Martin was caught in a thunderstorm. A bolt of lightning struck nearby, throwing him into panic. He vowed to become a Monk if his life was spared. This was his *road to Damascus* conversion. He was not harmed by the storm. Rather than going back to school, he entered a monastery. His father was enraged when he heard of his son's decision.

Throughout his life, Martin displayed signs of his emotional difficulties. He was given to crying and fainting spells, to fits of melancholy, and to rages reminiscent of his father's temper. He also had scatological preoccupations. Numerous anecdotes show that he was also preoccupied with his filial conflicts. For example, while he was a novice in the monastery choir, he once fell to the ground and shouted *It isn't me!* The fit had followed the reading of Mark which describes how Christ cast out devils from a possessed son. In his fury at Martin's becoming a monk, Hans suggested that Martin had made his sacred vows under the influence of the devil.

Later, while visiting Rome, Martin climbed the Lateran steps, the steps leading to the entrance to the church of the Pope, as the bishop of Rome. On each step, he said a prayer to save a soul in purgatory. According to his own report, however, on each step he compulsively wished his parents dead, so that he could save their souls as well! Reciting his first Mass, Martin reported that he suddenly felt that he was speaking directly to God. The thought so terrified him that he had to restrain himself to keep from running away.

The God Martin Luther feared — and later impressed on others — strongly resembled his own earthly father. Unlike the Roman Catholic God, but similar to his father, Luther's God could accept or reject people arbitrarily. No amount of care and scruples could ensure one's grace or protect one from God's terrible anger. Sins, however, were still to be punished, just as in Martin's childhood. God, according to Martin Luther, could be a *gluttonous fire* toward those who displeased him. In the monastery, one of Martin's instructors had found it necessary to remind Martin that God does not hate and that malice is a purely human emotion.

Psychologically, one of Luther's most important theological arguments concerned the Virgin Mary. By denying her the god-like status she had gained in Catholic worship, Luther further glorified the paternal, masculine aspects of deity. He also recreated his family constellation: The children are ruled by the powerful father; the mother is forced to the sidelines.

Some historical background puts these issues into a wider context. Some psychoanalytic scholars, such as Ernest Jones (1951) argue that submissive Oedipal wishes are at the heart of Christian doctrine, distinguishing it from its ancient rival, Mithraism, which was favored by the Roman Legions. Unlike Christ, who sacrificed himself to appease his father's wrath toward sinners, Mithra slew his father and reigned in his father's place. By ceasing to worship the mother, the Christian male renounced his patricidal wishes and strengthened his ties with God as the father. The mother returned, however, in the guise of the Virgin Mary, desexualized by St. Jerome who was an ascetic, a Biblical scholar, and the chief preparer of the Vulgate version of the Bible.

Consistent with the importance of her psychological functions, related to proximity maintenance strategies, the Virgin Mary gradually gained importance in Catholicism. By the time of the Reformation, she was virtually divine. Lutherans and later Protestants, according to Jones (1951), denounced the mother in her new form in order to better worship the father. To reshape God in his father's image, Luther had to defy the Pope, a father figure himself. Roman Catholics still refer to the Pope as the Holy Father. By assaulting the worldly incarnation of paternal authority and the ideology on which it rested, Luther made possible the eventual world-wide triumph of his own father's materialistic values (see Weber, 1930).

Luther perhaps thought that he had rebelled against these values by leaving the university and spoiling his father's plans for a well-connected marriage. But for Luther, it was always easier to *deify* his father than to *defy* his father. Ironically, so-called social Darwinism owed more to Luther and those who followed him than to anything Darwin himself wrote (see Lopreato, 1984).

Men who see God as a father figure may have ideas about him that suggest passive homosexual wishes. Freud (1923) believed that passive homosexual wishes result from an unresolved *negative Oedipus complex*. Rather than wishing to defeat the father and marry the mother, the young boy wishes to take the mother's place. In this way he denies his love for his mother, and symbolically submits to the father instead.

Male paranoid patients are frequently preoccupied with negative Oedipal themes (Wenegrat, 1984). They are also prone to religious delusions, with homosexual overtones. The most famous such patient was named Schreber. His published memoirs were studied by Freud (1911). More recently, Niederland (1959, 1959) reexamined Schreber's case in light of data not available to Freud.

Schreber was born in 1842, the son of a well-known but probably psychotic teacher. Schreber's father was delusionally preoccupied with his children's posture and upbringing. Starting in their infancy, he made a habit of restraining them with grotesque clamps and corsets. One of his devices attached to the child's head and body, so as to pull the hair if the head were not held absolutely upright. Another device was a harness with an iron bar that pressed painfully on the children's collarbones if they slouched at all. From the time they were 3 months old, the elder Schreber insisted that his children be bathed in cold water. He believed this would toughen their moral fiber.

Schreber became an eminent jurist. He first became psychotic in 1884, at the age of 42. He recovered after a few months and resumed his duties, but 8 years later he suffered a second collapse. From 1893 to 1902 he was held in an asylum against

his will. His memoirs, written toward the end of his 9-year hospital stay, were published in 1903. They describe his psychotic delusions. He believed himself in contact with God, who performed painful miracles by means of rays on Schreber's body. Analysis of Schreber's writings and of his personal experiences demonstrate a point-by-point correspondence between his delusional miracles and the actual treatments he had suffered at his father's hand.

The core of Schreber's delusions was that God would make him a woman, and then impregnate him by means of divine rays. He believed that his emasculation would give God pleasure. He also believed that after divine sexual intercourse, he would give birth to a new race. His delusions were maintained until his death. On the basis of this example, Freud concluded that passive homosexual wishes play a role in paranoid psychoses.

Kaufman (1939) described a patient much like Schreber, a paranoid schizophrenic who believed for many years that he was the Messiah. His delusions had formed on the way to the mental hospital, while sharing a berth with his father.

V.P. Gay's patient, Jane (1980), was attracted to a psychotic cult leader named Thomas. Thomas displayed the same combination of filial and homosexual elements, claiming to have participated in an initiation rite strikingly similar to Ezekiel's appointment as a messenger of God.

Religiously motivated self-castration is one of the most extreme expressions of a negative expression of filial conflict themes. The worshipper literally emasculates himself in order to please parental deities. Self-castration was common in the worship of ancient mother goddesses. The followers of Aphrodite, for example, severed their genitals and carried them through the streets. When they could go no further, they threw their severed parts into the nearest house. The occupants of such houses were thereby obliged to give them female clothing.

Weigert-Vowinkel (1938) concluded that self-castration in the service of mother goddesses had two symbolic meanings. First, the male worshipper renounces his sexual desire for the goddess, in relation to whom he is then like a child. Second, self-castration is a punishment of the Oedipal wishes intrinsic to these ancient religions.

Clinical cases histories and cultural history contain an abundance of similar accounts of male religious beliefs expressing filial conflict themes. When these conflicts are negative, submissive homosexual and self-punishing themes are prominent.

Mutualism — An Historic View

Mutualism requires:

1. a tendency to form stable social groups whose members distinguish between outsiders and insiders, according preferential treatment to insiders, and
2. a tendency for group members to adopt consensual world views, embodied in authority figures.

The strategies result in the formation of cognitively cohesive groups of cooperating individuals who are potentially hostile to others. Religious beliefs serve both of these mutualistic strategies. Religious beliefs define group boundaries. They promote in-group cooperation, and frequently promote out-group hostility. Religious beliefs define and legitimate in-group authority, and the penalties for failure to accept authority.

New religious enthusiasms frequently trigger large-scale collective endeavors, for example, the conquering of the Middle East in the early 17th century by Arabs. At that time, the Arabs were split into kin or town groups. The average Arab owed loyalty to his tribe, clan, or town, but not to a larger group. Neighboring clans fought blood feuds, towns and tribes waged wars, and robber bands harassed trade routes. Even within the small group, cooperation was limited.

Men were judged less by their contribution to the common good than by their seeming recklessness and abandon in combat. The ideal 6th century Arab would sacrifice everything, including the well-being of loved ones, for the sake of revenge, for passion, or to play the extravagant host.

At the time of Mohammed's birth, around 571 AD, most Arabs were practicing henotheists — they acknowledged a supreme creator God, Allah, but considered everyday affairs more the concern of lesser deities, to whom prayers were more effectively addressed. These lesser deities were local gods, and were worshipped in competing shrines, such as the Kaaba in Mecca. These shrines depended more or less on local patronage.

Jews, Christians, and indigenous monotheists were minority groups among the Arabs. Jews were allied with Persia, and Christians with Byzantium. Indigenous monotheists , called *hanifs*, from the Arabic word for infidel, worshipped the supreme creator God, but not the lesser gods found in Arab shrines.

Mohammed's revelations, recorded in the Koran, laid down the basis for a common Arab identity, ideology, and cooperative ethic. They triggered energetic activities in unforeseeable ways. First, Mohammed told the Arabs that they were all descendants of Ishmael, and through him, of Abraham. Allah, already acknowledged by Arab henotheists and monotheists, had now sent them a prophet equal in dignity to those he had sent the Jews. Second, Mohammed revealed a universal God. The local shrines were ruthlessly eliminated. Mecca became the center of Arab religious identity. Gabriel had saved Ishmael's life at Mecca. Abraham, himself, had built the Kaaba there. Every Muslim prayed facing Mecca, and visited Mecca at least once in his life. Finally, Mohammed devised a new standard of conduct. Men would be judged according to God's cause. Those who put private or tribal concerns ahead of God's kingdom could expect eternal torments. Those who made the greatest sacrifices — for example, dying in a holy war — could expect to live in paradise eternally.

Mohammed was persecuted by his own clan, who saw him as a threat to the lucrative Meccan shrines. In 622, they forced him into exile in Medina. But Mohammed lived to see his religion triumphant. First, the Hejaz, then the peninsula as a whole, and finally Syria, the Holy Lands, and Egypt full under the power of the newly united Arabs. Eventually, Byzantium itself, the whole of North Africa, Persia, India, and Spain were controlled by Arabs. Yet, in numbers, the Arabs were a small proportion even in their own empire, let alone the whole world.

Arab scholars preserved classical literature, invented the modern alphabet, and laid down foundations for mathematics and science. Their achievements are emulated even today. Copies of their inventions are found on every continent. Muslims today live throughout the world, and are the majority, or a sizable minority, in countries from Indonesia to Morocco, and from Pakistan to equatorial Africa.

Religion can promote mutual action, and the need for mutual action can also produce new religions. Consider the example of the Ghost Dance among Native American Tribes in the 1890s. At that time, most Native Americans, particularly the Plains Tribes, were poverty-stricken and semi-starved. They had been driven from their land and forcibly settled on reservations without means of survival. They lacked reliable provisions from the U.S. Government. They were forced to send their children to government schools where tribal authority was undermined by missionaries, and by Indian police who had to answer to the white man. They were desperately in need of inter-tribal cooperation. But they lacked weapons, were outnumbered, and did not understand the white man's system of government. All these conditions cried out for a collective problem solution.

The Ghost Dance religion originated around 1870 with a Paiute shaman, Tavibo. His son, Wovoka, revived the dance in the late 1880s. Wovoka predicted the imminent beginning of a new age, which Indians could hasten by performance of the Ghost Dance. In the new age, the earth would be renewed, game would be plentiful, and the white man would be gone.

From across the Plains, tribal emissaries traveled to Nevada to meet Wovoka and learn the sacred dance. Previously hostile tribes gathered together to dance and sing. The seditious sentiments expressed by the Native Americans on those occasions alarmed the white authorities. Steps were taken to prevent free travel by the Native Americans. Ghost Dance leaders were imprisoned.

In the summer of 1890, a Sioux outbreak occurred at the Pine Ridge Agency, where the Ghost Dance movement had reached a fever pitch. Though the outbreak had resulted from incompetent government agents, broken promises, and hunger, most whites preferred to blame the Ghost Dance itself. A band of Sioux, attempting to surrender, were slaughtered at Wounded Knee.

Wovoka later claimed that the Sioux had twisted his doctrine. The massacre at Wounded Knee turned Native American opinion against the Ghost Dance religion. Its remnant practices lost their millenarian fervor. Performance of the Dance changed in meaning, assuring eventual happiness, but not the imminent end of the white man's world. Other religions soon replaced the Ghost Dance. Although the distribution of Peyote was prohibited by Congress in 1887, within ten years of the massacre at Wounded Knee, peyote enjoyed an increasing popularity in Native rituals. The Native American Church, members of which now enjoy the legal right to use peyote ritually, was formed less than 30 years after that massacre.

In general, the need for cooperative efforts under dire circumstances tends to provoke formation of religious beliefs and actions. The Ghost Dance movement is one example of a nearly universal, human response to collective, dire circumstances. So religious beliefs can trigger mutualistic efforts, and mutualistic efforts can spawn religion.

Individuals who for one reason or another do not feel part of a cooperating, cognitively cohesive group, are prone to religious enthusiasm. The rapid growth in cults in recent years provides ample evidence of this phenomenon.

Except for dependency and attachment problems, those who join religious cults show no other identifiable personality traits. Socially, they are different, in that they are typically alienated from non-religious social groups, such as family, friendship cliques, work communities, etc. According to Lofland and Stark (1965) converts to the D.P. cult were frequently so unintegrated with society that *they could, for the most part, simply fall out of relatively conventional society unnoticed.* Levine (1979) interviewed members of more than 8 cults, finding they shared in common alienation and loneliness. Other studies have supported these findings consistently.

Proselytizers, as well as social scientists, know that socially isolated individuals are easiest to convert to cult membership. In Western societies, there has long been a gap between primary and secondary socialization — the transition between family life and adult status in a work-community. This takes place usually during late adolescence. Consequently, cults direct their efforts at young people, mainly, young people who are disaffiliated, just leaving home, taking advantage of their vulnerability. University campuses are recruiting locations, particularly during the beginning of the academic year. In modern society, the elderly, too, are prone to cult conversion, because they are often more lonely than others, especially the bereaved, those living alone, and residents of nursing homes.

Once in contact with the isolated person, cult recruiters concentrate their efforts on making the potential convert feel part of the group. They may be invited to a special retreat, where they meet more friendly people. They are never left alone. The use of affection makes recruits feel part of the religious community. Some have called this technique *love bombing*, to indicate its power.

[In general, history contains a nearly endless supply of examples of the connection between beliefs and community. The two phenomenon ought to be considered different aspects of a unified behavioral system]

Specific beliefs are secondary to the social processes that go on in a cult. People often seem possessed by the cult and its system. If the primary, evolutionarily determined function of religion is to achieve membership in a cognitively cohesive social group, then the personal benefits of religious activity and feelings of belonging should be correlated. In fact, they are correlated (Galanter and Buckley (1978; Galanter, 1978). The strength of reported belief and perceived group cohesion are strongly correlated among members of religious groups. Converts who feel most tied to a religious group report the greatest improvements in their well-being. Galanter (1978) argues that affiliation with large groups is an innate need. Frustration of that need leads to distress, and vulnerability to religious recruitment.

People who voluntarily leave cults are those who feel less-integrated, less emotionally affiliated with other cult members. They also tend to experience a paranoia phase after leaving the cult, as an expression of the emotional distress following separation.

Affiliative needs are important to mainstream religion, too. For example, although American churches teach brotherly love, religiously active people show either more, or markedly less prejudice against outsiders than non-religious people (Allport, 1954, 1966). Allport called these two types *extrinsically* and *intrinsically* religious. The former were relatively prejudiced, and the latter were very unprejudiced. Others have used the terms *consensual* and *committed* to refer to the same phenomenon.

Extrinsic (or consensual) religiosity is the search for an in-group experience. People like this are generally conformists, highly attuned to rules, sensitive to social rank, envious of persons above them, chauvinistic, authoritarian, and ethnocentric. For them, religion is often exclusionary, whereas intrinsic (or committed) religiosity stresses universalism and respect for other faiths.

Extrinsically religious persons are more often converts, have fewer if any visions or religious experiences, are more likely to proselytize, more likely to believe that every individual should belong to the same faith, and feel that leaders deserve blind obedience. Obviously, group-related strategies underlie extrinsic religiosity, whether found in cults or in the mainstream of religion.

Some religions have institutionalized explicit mechanisms to reduce the group-related functions of religion. For example, there is a Hindu rite that assigns to every young worshipper a private name for God. A teacher chooses this name to reflect the young person's character. It is kept secret, used only in private prayers.

Altruism — Reciprocity with God

Many religions favor altruistic behavior. Many charitable and humane practices owe their existence to the activities of religious organizations. Many studies have been performed to determine if believers are really more altruistic when called upon to help others as individuals. Generally, studies support the idea that religious believers are more altruistic, but the issue is complex.

Most studies have been done using questionnaires, which correlate poorly with actual behavior, due to the desire on the part of many subjects to give socially acceptable answers. Also, readiness to give aid to others varies from one situation to another. And finally, readiness to help others may reflect a style of religion, rather than religion in general.

Insofar as an individual's religiosity revolves around in-group strategies, he may help others only if the person in need of help is a member of his own group. A related datum is that religion, per se, fails to prevent criminality. Clearly, egoistic acts are antithetical to altruism. But again, the issue is complex.

Different individuals respond to different situations, sometimes altruistically, sometimes egotistically. A thief, for example, could jump into a frozen river to save another, while a law-abiding citizen looks on helplessly, determined not to risk his life. The religiously inspired altruist believes he has a reciprocal, altruistic relationship with God, and that God wants him to help others. Reciprocal altruism with God is a major theme in monotheistic religions. Why is this so? Probably because God is an attachment figure.

Human parents preside over sibling rivalries among their children. Inclusive fitness strategies include, among other behaviors, kin-directed altruism. Parents everywhere discourage selfishness between their children. This results in continuous pressures on the children, affecting every aspect of parent-child relations. Parents see their family as a kinship system, and work against their children's tendencies to behave in dysfunctional ways. The parents preside over the system, most often by choice, while the children are involuntary members.

Insofar as God is an attachment figure, meaning a universal parent in the mind of the believer, worshippers attribute to God a similar attitude toward altruism that parents demonstrated in believers' childhood. Siblings are held responsible for each other, and members of one's religious group, are, by extension, symbolically, brothers and sisters. This is the way religion extends altruism beyond the limits determined by evolutionary selection, extending altruism to strangers who are not members of either kin group or one's local, known community.

Kin and members of one's personal community can generally be counted on to reciprocate. Strangers can not, yet people often behave altruistically to strangers, in spite of the fact that such behavior is not, and can never be, a rational strategy. Hunter-gatherer tribes, with religion focused on kin groups and face-to-face communities, typically divide when they grow too large to allow every member of the community to have a relationship with every other member.

Identification with a parent figure who demands altruism is emotionally rewarding to the believer. In such cases, the internalization of an attachment figure operates as a psychological, self-rewarding system, the positive side of what Freud called the superego. The positive side of the superego has received far too little attention in the literature, probably because of the emphasis Freud placed on the conflicts between the individual and society, and the corresponding inattention he paid to the symbiotic aspects of individual-group interaction.

In America, it must be noted, the ability of religion to induce general altruism is considerably muted by a cultural and economic system that emphasizes the individual (Bellah et al., 1985). Americans are easily mobilized against external, outgroup threats, but they are relatively unmoved by the suffering of even other Americans if those others are not members of their immediate community. Note, for example, Americans' dislike for welfare and other so-called socialistic measures.

Not all religions directly encourage altruism through this mechanism. For example, Buddhism is an atheistic religion. Historically, its vision of salvation and of social interests are disconnected. Hindus once believed that victims of illness or deformity had been guilty of crimes in their previous lives. Lepers were thought to have stolen clothes. The blind were thought to have stolen lamps. The mute were thought to have stolen the words of the Veda. Such victims were *despised by the virtuous*, and forbidden from temple sacrifice.

The Christian Aladuras, along with some other modern African sects, also consider illness a punishment for sin. They believe efforts to relieve the suffering of the sick interfere with God's judgment. Likewise, ancient Jews believed that leprosy resulted from the commission of various sins. Segregation of lepers was as much a moral segregation as a hygienic practice. In the middle ages, the Christian Church reversed this idea,

claiming lepers were specially blessed. Surely anyone who suffered so much in this life, would be blessed by special salvation in the after life.

Attachment to a parent figure that demands altruism also does not guarantee socially desirable behavior. People can exercise considerable ingenuity in avoiding ethical demands. For example, Southern slave-holders were usually very religious Christians, yet they were able to define African Americans as outside of humanity in order to *own* them. The unemployable can be seen as lazy, worthless, no-good people who do not deserve assistance in a competitive society such as ours. Most Americans believe, contrary to fact, that the vast majority of individuals on welfare are shirkers. However, studies have shown, again and again, that only a small minority of welfare clients are avoiding work.

Finally, attachment to a parental God who demands altruism is exploited by the ruling class in any society to encourage social docility, sometimes sincerely, sometimes manipulatively, to promote lower-class tranquility in the face of socio-economic inequality that favors the powerful.

To quote the historian Gibbon (in Harrington, D. A., *The Politics of God's funeral: The spiritual crisis of Western Civilization*. New York, Penguin Books, 1983, p. 26):

> *The various modes of worship which prevailed in the ancient world were all considered by the people as equally true; by the philosophers as equally false; and by the magistrates as equally useful.*

According to Napoleon, on the *mystery of religion*:

> *This mystery is not that of the Incarnation...I see in religion the whole mystery of society. I hold...that apart from the precepts and doctrines of the Gospel there is no society that can flourish, nor any real civilization. What is it that makes the poor man take it for granted that ten chimneys smoke in my palace while he dies of cold — that I have ten changes of raiment in my wardrobe while he is naked — that on my table at any meal there is enough to sustain a family for a week: It is religion which says to him that in another life I shall be his equal, indeed that he has a better chance of being happy than I.*
>
> (Harrington, 1983, p.25)

The most extraordinary inequalities have historically depended on religion for legitimation among the lower classes. The Hindu caste system, for example, depends on the Hindu concept of Dharma, or duty, as the highest aspect of one's social role, and upon the notion of successive reincarnation as the means of upward mobility.

In the West, St. Paul, for example, considered social evils, including slavery, war, and poverty, as the consequence of individuals' sins. In the feudal age, the concept of divinely ordained duty was added to the Pauline formula as a prop for the social order. The condition of the social classes was ordained by God. In the Elizabethan age, the social order was portrayed as integrated with a sacred order, referred to as the Great Chain of Being, a portrait of the social class system as integral to a larger, sacred, cosmological hierarchy.

Rather than worry over social problems, many Christians are counseled to seek only their own salvation. In America, *social gospels* have always been controversial. The most famous treatment of this aspect of religion is, of course, Engels' expression *Religion is the opiate of the people.* (McLellan, 1973). Remember, too, that religion is used to topple political systems, as well as to support them. The Church-Sect dichotomy is the classical account of these differences.

In conclusion, the sociobiological model explains religion as a symbolic by-product of biological instincts encoded in our genes, genes which exist because of their ultimate value in promoting the survival and reproduction of genes. The lengthy process of natural selection has been going on for millions of years. The vast majority of natural history to date occurred prior to the development of culture and technology. Our genetic heritage developed under different circumstances than those found in the modern, civilized world.